

SFY 2007 Idaho Regional Substance Abuse Prevention Needs Assessment

Youth Substance Use in Idaho

Idaho residents use a number of different illicit substances. For Idaho's minor population, these substances include alcohol, smoking and smokeless tobacco, marijuana, cocaine, opiates, depressants, tranquilizers, hallucinogens, inhalants, methamphetamines, ecstasy, steroids, and over-the-counter and prescription medications. According to the Idaho Substance Use, Safety, and School Climate Survey (SUSSCS) administered by the Safe and Drug Free School office of the Idaho Department of Education, the three most common substances used by Idaho's minors are alcohol, tobacco, and marijuana. Of the more than 15,000 6th, 8th, 10th and 12th grade respondents to the SUSSCS in 2004, approximately 25% reported consuming alcohol in the 30 days prior to the survey. Twelve percent reported using tobacco in the prior 30 days and 9% indicated that they had used marijuana in the same time period. Just over 10% of the respondents reported using two or three substances in the 30 days prior to the survey. When multiple substances were reported, the most common combinations were of alcohol, tobacco and marijuana, with alcohol involved in almost every case.

While other substances (e.g., methamphetamines) have received considerable attention within the media and state government, their use pales in comparison to the three dominant substances reported by Idaho's youth. The percentages of respondents reporting 30-day use of the most common substances are shown in Table 1. Because of alcohol's popularity among Idaho's teenagers and because it was almost always involved if more than one drug was reported, it was used as the primary indicator of substance use and substance abuse prevention need.

Table 1. Reported current substance use by 6th, 8th, 10th and 12th grade respondents on the 2004 Idaho Substance Use, Safety, and School Climate Survey

Substance	Percent of respondents reporting use prior 30 days
Alcohol	24.1%
Tobacco	11.2%
Marijuana	8.7%
Methamphetamines	1.6%
Cocaine	1.5%
Ecstasy	1.3%

Idaho Trends

Statewide trends in substance use among Idaho teens are tracked by two federal agencies, the Substance Abuse Mental Health Services Administration (SAMHSA) and the Centers for Disease Control and Prevention (CDC). Substance use reported by school-aged youth is also tracked by the Idaho Department of Education. Each of these organizations conducts regular surveys with the goal of measuring substance use by minors. Results from each of these organizations are highlighted below.

SAMHSA and the National Survey on Drug Use & Health

Annually, SAMHSA conducts the National Survey on Drug Use & Health (NSDUH). Among other issues, the survey gathers data concerning substance use by household members throughout the United States. Starting in 2002, SAMHSA began providing state level estimates of substance use by age group. SAMHSA combines two years of data into a single number and divides the respondents into three categories by age, 12-17, 18-25, and 26 and older. Since 2002, two substance use estimates based on 2002/2003 and 2003/2004 are available. The data in Table 2 show the Idaho NSDUH 30-day substance use rates for individuals 12-17 years old. Although the trends are encouraging, it is unlikely that the differences are statistically significant.

Table 2. Idaho NSDUH 30-day substance use rates for individuals 12-17 years old.

Substance	Survey Years	
	2002/2003	2003/2004
Alcohol	17.37%	17.21%
Tobacco	14.70%	14.51%
Marijuana	7.92%	7.29%

Centers for Disease Control and the Youth Risk Behavior Survey

The CDC has conducted the national Youth Risk Behavior Survey (YRBS) every other year since 1991. The YRBS surveys a representative sample of 9th, 10th, 11th, and 12th graders and monitors health risk behaviors in six categories:

- tobacco use;
- alcohol and other drug use;
- behaviors that contribute to unintentional injuries and violence;
- sexual behaviors that contribute to unintended pregnancy and STDs, including HIV infection;
- unhealthy dietary behaviors;
- physical inactivity.

Idaho has participated in the YRBS for five of the seven years it has been administered. Changes in use rates of tobacco, alcohol and other drugs over those five survey epochs provide valuable insight into substance use trends by Idaho's teenagers. It should be noted that the 2003 survey data show reductions in use rates relative to the 2001 and 2005 in many grades and for many substances. This may reflect a genuine drop in reported substance use in 2003. It is unclear, however, what might account for this change. *These reductions stand-out because rates in 2005 appear to return to 2001 levels.* For example, 10th and 12th grade alcohol use, in 2005 are comparable to those in 2001.

YRBS Current Users

The YRBS asks respondents to report if they have used substances in the 30 days prior to completing the survey and terms positive respondents "current substance users". Because Idaho did not gather data in 1995, 1997 and 1999, there are gaps in the survey data. Data from the 1991 and 1993 surveys have been included to provide some historical context. It is important to note that the percentage of Idaho teens that reported substance use was below the national average for alcohol, cigarettes, marijuana and cocaine for all of the survey years (see Table 3).

Table 3. Idaho and national youth reported current substance use rates as measured by the YRBS.

	Substances							
	Alcohol		Cigarettes		Marijuana		Cocaine	
Year	Idaho	US	Idaho	US	Idaho	US	Idaho	US
1991	42.2	50.8	23.3	27.5	10.2	14.7	NA	1.7
1993	43.6	48.0	27.3	30.5	13.0	17.7	2.8	1.9
2001	40.6	47.1	19.1	28.5	17.5	23.9	3.2	4.2
2003	34.8	44.9	14.0	21.9	14.7	22.4	2.0	4.1
2005	39.8	43.3	15.8	23.0	17.1	20.2	2.4	3.4

YRBS Alcohol

Data from the five surveys starting in 1991 show there has been little change in percentage of current alcohol users among Idaho's youth. In 2001, 40.6% of all respondents reported alcohol use in the prior 30 days (current youth alcohol users). In 2003, this percentage dropped to 34.8% and increased to 39.8% in 2005. The percentage of current alcohol use by grade and survey year is shown in Figure 1 and Table 3. The apparent absence of stable change in the past 14 years suggests that use rates are unlikely to change easily.

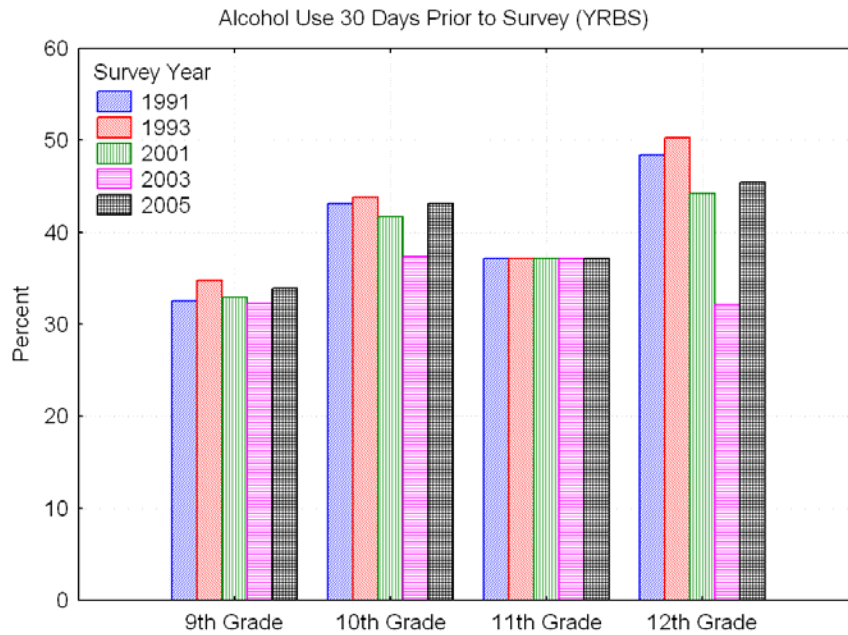


Figure 1.
 Current alcohol users as measured by alcohol use 30 days prior to the survey.

Cigarettes

Since the early 1990s, the percentage of current cigarette users among Idaho youth dropped dramatically. Between 2001 and 2003, the percentage of cigarette users dropped about 3% but rose again in the 2005. The difference between 2003 and 2005 rates was not statistically significant. Figure 2 shows the percent of current cigarette smokers by grade and survey year. The impact of tobacco prevention efforts and a reduction in the acceptability of tobacco use beginning in the 1990s is reflected in the reduction in use rates.

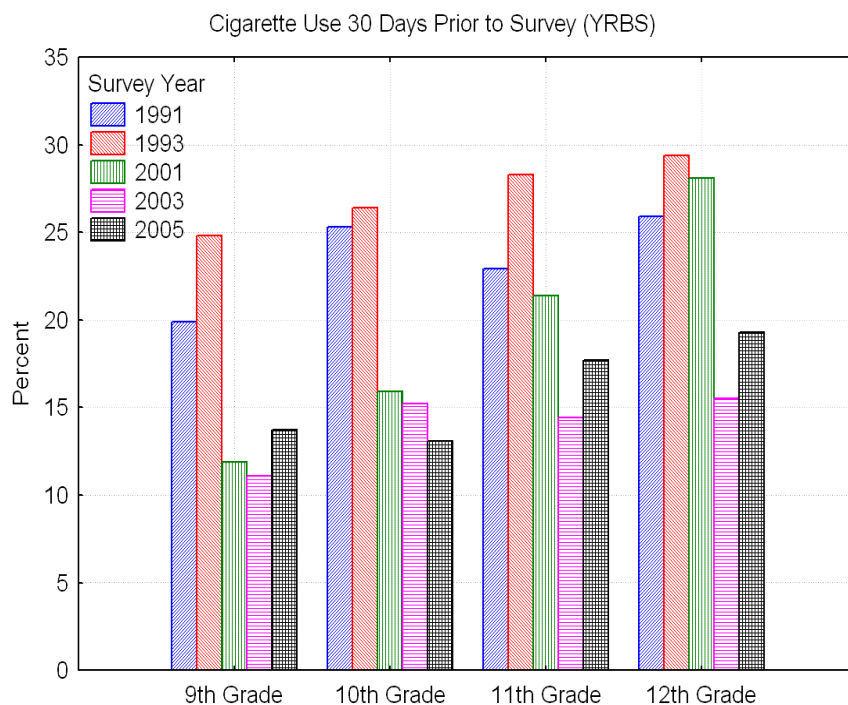


Figure 2.
 Percent of YRBS respondents reporting cigarette use 30 days prior to the survey.

YRBS Marijuana

Compared to data from 1991, the percentage of marijuana use among youth has increased. This increase might reflect an increased availability and mirrors the national trend. In every survey year, however, Idaho youth report less marijuana use than the national rate. In the two most recent survey years, the overall percentage of current marijuana users has not changed significantly despite a decrease in 2003 (see Table 3 for percentages). The dip in use rates is dramatic for 11th and 12th graders between 2001 and 2003, but there is a considerable increase from 2003 to 2005 for 12th graders (see Figure 3).

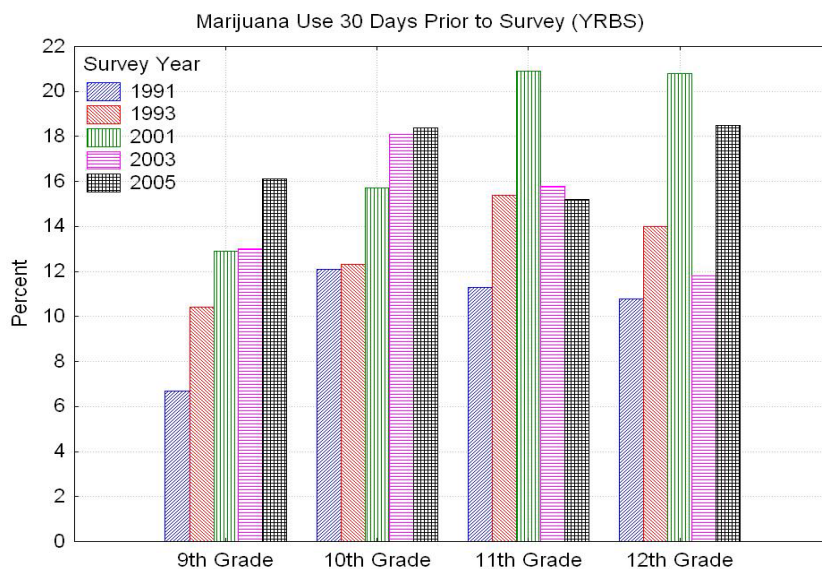


Figure 3.
Percent of
respondents
reporting
marijuana use
30 days prior
to the survey.

YRBS Cocaine

The percentage of current cocaine users has varied from 2 to 3.2 percent since 1993. Data for 1991 were not available. For grades 9 through 11, the rate remained at or under 2% in 2003 and 2005. For respondents in the 12th grade, however, the 2003 rate was just above 2 % but increased to over 5 % during the 2005 survey. With this exception, the rates since 2001 have been generally lower. Figure 4 shows the percent of current cocaine users by grade and survey year.

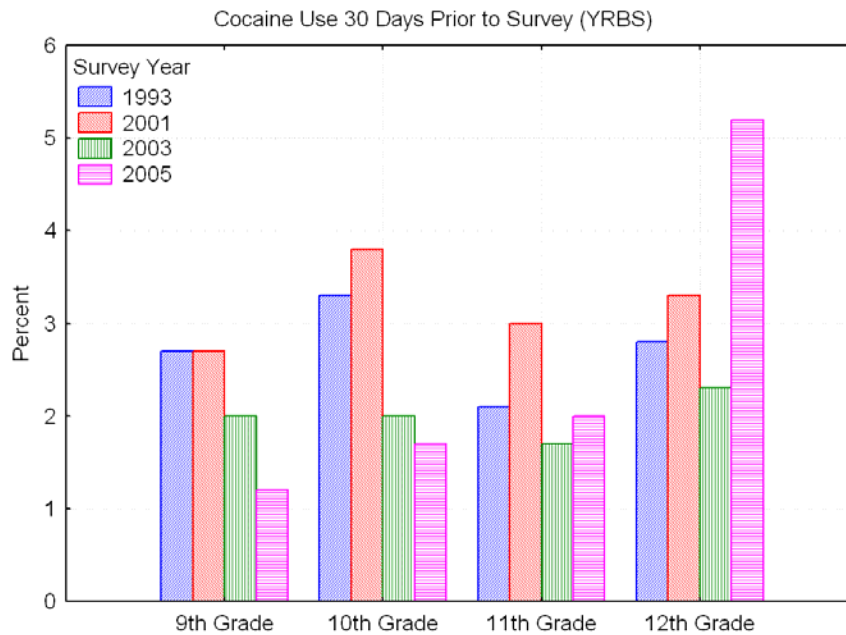


Figure 4.
 Percent of
 YRBS
 respondents
 reporting
 cocaine use
 30 days
 prior to the
 survey.

YRBS Methamphetamine – Idaho

The YRBS does not assess 30-day methamphetamine use. It does ask about lifetime use (see Figure 5). For all but the 11th grade methamphetamine use has decreased since 2001. For all grade levels reported lifetime methamphetamine use is lower than the national rates (see Table 4).

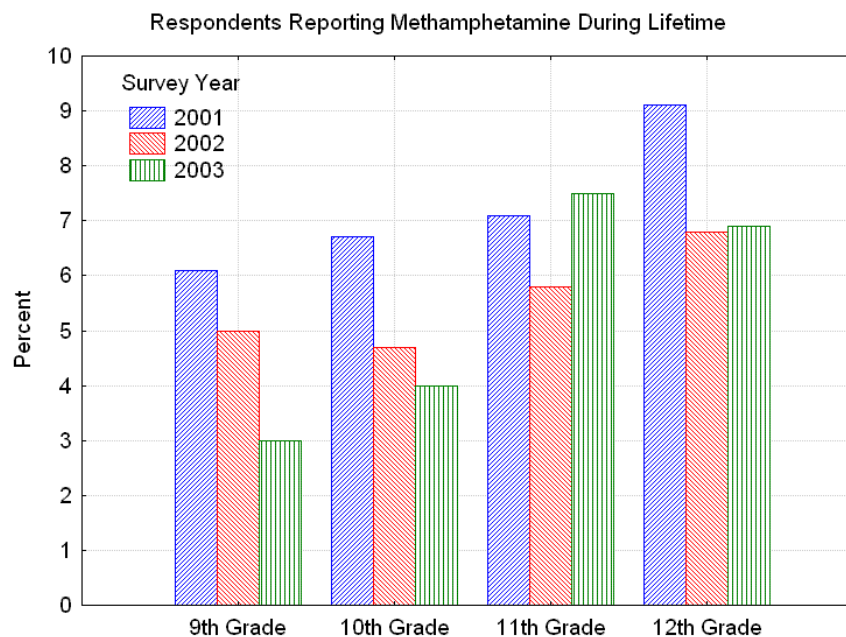


Figure 5.
 Lifetime use
 of meth by
 year and
 grade as
 reported by
 the YRBS.

Table 4. Percentage of YRBS respondents reporting lifetime methamphetamine use for Idaho and the nation.

Survey Years					
2001		2003		2005	
Idaho	US	Idaho	US	Idaho	US
7.2	9.8	5.6	7.6	5.3	6.2

YRBS Summary

Since the 2001 survey, reductions in all four substances can be seen in the 2003 results. Any reduction that might have occurred in 2003 appears to have been lost in 2005. 2005 data for alcohol and marijuana are comparable to data gathered in 2001. In fact a statistical comparison of the 2003 and 2005 data for the above substances across all grades shows no statistically significant change. Recent efforts to curb alcohol, tobacco, marijuana, and cocaine use by Idaho teens are difficult to detect in the YRBS data.

Idaho Substance Use, Safety, and School Climate Survey

The SUSSCS has been administered by the Idaho Department of Education every other year since 1996. As with other substance use surveys, the SUSSCS asks respondents to report the use of substances in the 30 days prior to the survey. Similar to other surveys, alcohol use reported on the SUSSCS co-occurs with and overshadows other substances and serves as a relatively clean indicator of individual tendency towards substance use. Figure 6 shows the percentage of respondents who reported alcohol use at least once in the 30 days prior to completing the survey (i.e., current users). The graph shows these data for grades 6, 8, 10, and 12 for the five years the survey data are available.

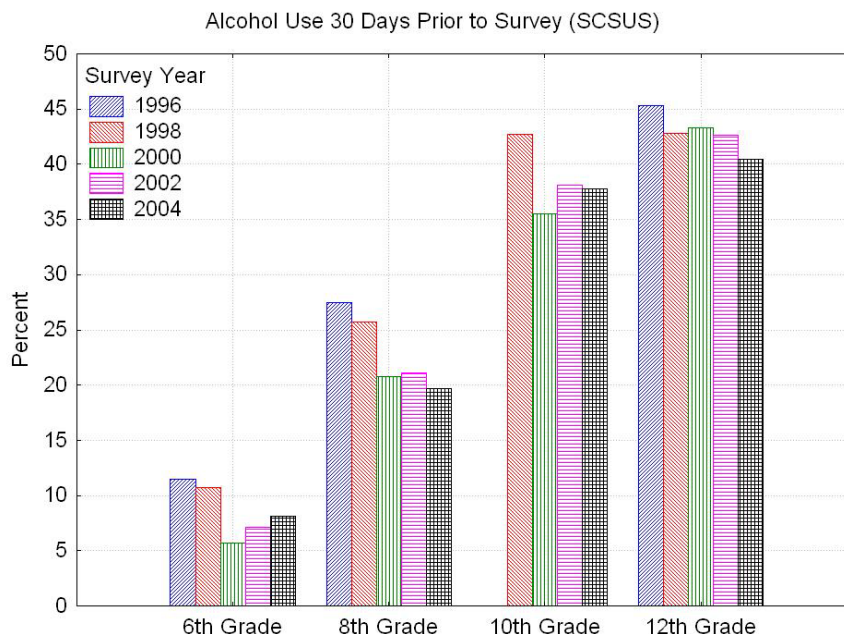


Figure 6.
 Percent of
 SUSSCS
 respondents
 reporting
 alcohol use
 30 days
 prior to
 completing
 the survey.

Although there has been some variability, the percent of current alcohol users has dropped from the highest values obtained in 1996. This is particularly the case for respondents in the 6th, 8th and 10th grades. For these grades the reductions are prominent following the 1998 survey. The rate of reduction for 12th graders, however, appears to drop more slowly, less than 5% since 1996.

The SUSSCS gathers data concerning the 30-day use of other drugs (e.g., tobacco, marijuana, cocaine, methamphetamines, and ecstasy) but the data for these drugs are not presented in a manner that allows an analysis over the survey years.

Alcohol Use by County

None of the statewide surveys discussed above were designed to provide county level data. Although the SUSSCS surveys a large number of students, its sampling method is not focused at the county level. In the 2004 survey, for example, no students were sampled in Bear Lake, Blaine, Boise, Boundary, Butte, Gem, or Washington counties. Another characteristic of the SUSSCS is that it does not consistently sample grades in each school. Although the survey was not specifically designed for a county level analysis, it is the single best source of information concerning substance use by Idaho minors. Data from the SUSSCS are used as the basis for county level estimates of alcohol use. This process, however, comes with notable limitations.

Caveats

Given the repurposing of the SUSSCS data from a school district to a county level, any interpretation must be carefully weighed by the methods used. School district data were averaged into county level estimates of substance use. When viewed at a county level, there were instances of missing data or small sample sizes. When a county datum was missing, it was replaced with the statewide average for that grade. When a sample size was thought to be prohibitively small it was compared to an arbitrary sample size of 30 and to an estimated sample size based upon a predetermined confidence interval. If the sample size did not exceed the estimated sample size and was less than 30, the statewide average for that variable was substituted. Regrettably, no single method of data substitution was completely satisfactory.

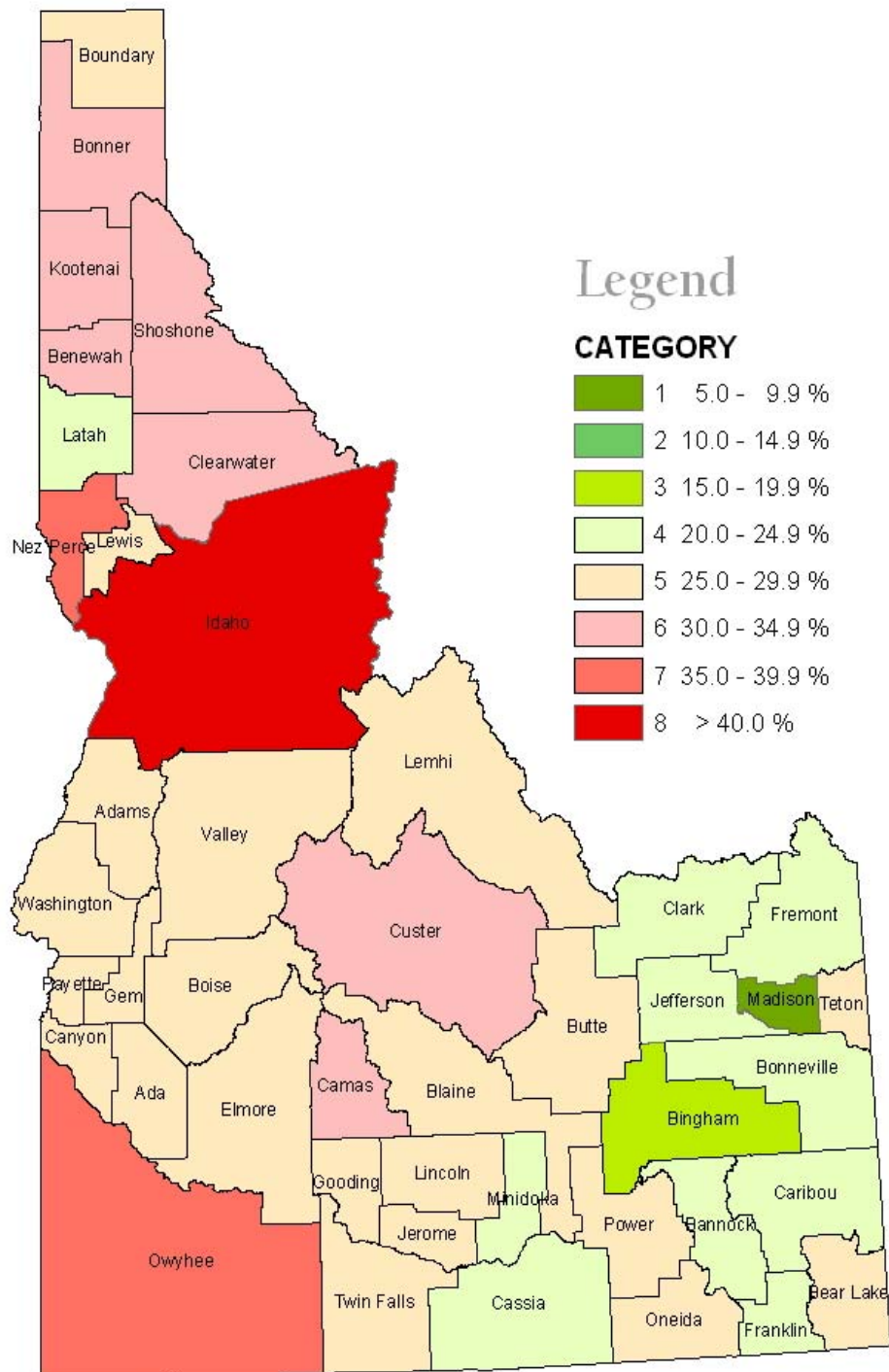
SUSSCS Current Alcohol Users

Responses to the SUSSCUS regarding 30-day alcohol use were used to create a statewide metric of substance use (i.e., current alcohol users). A weighted 30-day alcohol use metric was calculated using SUSSCS data and school population data. The resulting variable combined data from all grades surveyed into one measure. It can best be interpreted as the percentage of current alcohol users in the 6th, 8th, 10th and 12th grades. As was the case with the YRBS, this weighted 30-day alcohol use variable will be referred to as “current alcohol users.” Not all county and grade combinations were surveyed by the SUSSCS. When missing grade data were encountered, the appropriate statewide average for that grade was used. The data were then summarized by county (see Table 5 and Figure 7). At best, these values should be viewed as rough rankings.

Table 5. Current youth alcohol use by county for 2004 SUSSCS survey sorted from lowest to highest

County	Percent	County	Percent	County	Percent
Madison	7.0%	Blaine	26.0%	Lincoln	29.0%
Bingham	15.6%	Teton	26.8%	Bonner	29.3%
Bannock	19.7%	Lemhi	27.2%	Boundary	29.4%
Clark	20.6%	Benewah	27.3%	Bear Lake	29.5%
Bonneville	21.0%	Valley	27.3%	Ada	30.7%
Jefferson	21.9%	Washington	27.7%	Owyhee	31.0%
Cassia	22.7%	Payette	27.7%	Clearwater	31.4%
Fremont	22.8%	Boise	28.0%	Kootenai	31.8%
Franklin	22.8%	Adams	28.0%	Canyon	31.9%
Latah	23.8%	Twin Falls	28.0%	Shoshone	32.1%
Minidoka	24.2%	Butte	28.2%	Camas	34.7%
Caribou	24.3%	Gem	28.6%	Custer	36.6%
Oneida	25.1%	Elmore	28.8%	Nez Perce	37.5%
Power	25.2%	Lewis	28.8%	Idaho	40.8%
Jerome	25.6%	Gooding	28.8%	State Average	27.2%

Figure 7. Percentage of current youth alcohol users by county as derived from the 2004 SUSSCS. The statewide average was 27.2%.



Substance Use Correlates

Research on adolescent substance use has focused on the relationship between characteristics of individuals and the environments where they live. David Hawkins, Richard Catalano, and Janet Miller reviewed the research literature to identify what they called risk and protective factors. This work was later described in a 1992 book entitled, *Communities that Care: Action for Drug Abuse Prevention*. These factors are divided into four separate categories: Individual / Peer, School, Family, and Community.

A variety of individual / peer, school, family, and community factors were found to be related to substance use by Idaho minors. Variables representing each category of risk and protective factors were obtained and summarized by county. The data were then correlated with current alcohol use. As has been shown in prior research, many of the variables displayed significant correlations.

Caveats

Researchers use a variety of methods when studying the relationships between substance use and risk and protective factors. In the ideal cross-sectional study, data from a single point in time would be gathered and analyzed. Although gathering data from a common timeframe is getting easier with time, differences occur. For example, most housing related data were gathered during the 2000 census. Some high growth counties have been updated, but most of the data still reflects the state in the year 2000. Differences in when data are collected should always be considered when interpreting correlations. This consideration should go beyond the inherent limits in correlational research.

As with all correlations, a relationship between two variables does not imply causation. Just because measures of economic deprivation are correlated with current alcohol use, it is not possible to conclude that economic deprivation causes alcohol use. If economic deprivation caused alcohol use among minors, underage drinking should be virtually absent in economically prosperous areas. This however, is not the case. It is also important to consider that the risk and protective factors are not mutually exclusive. It is likely that variables within any category will themselves be highly correlated. Although several community variables are correlated with current alcohol use, one should not conclude that these variables represent unique aspects of the community.

The risk and protective factor model common in the prevention literature was used to identify potential community, family, school and individual/peer data that might be correlated and therefore shed light on alcohol use by Idaho minors. Every reasonable effort was taken to find data representing the separate risk and protective factors categories. In some instances the available data matched a category well. In others, however, the categorization was not as clear. In these cases, the researchers placed the data in the category where it had the greatest consistency and meaning.

Finally, a variety of risk and protective factor variables, although correlated with youth reported alcohol use, cannot be readily influenced by substance abuse prevention services. The death rate is a prime example. For Idaho counties, death rates are significantly correlated with current alcohol use among respondents to the SUSSCS: as the death rate in a county rises, so too does youth alcohol use. Substance abuse prevention services cannot directly influence the death rate. However, the correlation between these two variables may reflect characteristics of these counties that might be amenable to prevention services.

Analysis Method

The SUSSCS contains many survey items regarding school climate and substance use. In an effort to reduce the number of individual data points, data from related or similar survey items were combined using factor analysis. Factor analysis is a data reduction technique that groups related survey items into common factors. The resulting factors are then interpreted and factor scores are created. In many instances, a factor consisted of four or more items that reflected the same underlying characteristic of an individual, family, or school. For example, multiple survey items looking at student perception of availability would naturally cluster together because they examine different aspects of the same underlying factor.

The risk and protective factor data and the newly created factors from the SUSSCS were correlated with the current alcohol use data created from the SUSSCS at the county level. The data were not correlated at the region level because of the small number of counties in each region. The correlations are presented without considering how one risk or protective factor might be related to any of the others. A positive correlation shows a relationship where as one measures increases, the other measure also increases. A negative correlation shows a relationship where as one measures increases, the other measure decreases.

Individual / Peer Factors

Eight variables within this category correlated with the current youth alcohol use measure. Table 6 shows the correlations between individual/peer factors and current alcohol use.

Table 6. Correlations between individual/peer factors and current alcohol use.

County Level Variables	Correlation	County Level Variables	Correlation
Student Disapproval of Substance Use by Others	-.66	Involvement in Extra-curricular Activities	.40
Student Perception of Substance Use Risks	-.81	Intensity of Recent Substance Use	.58
Substance Use by Friends	.82	Trouble or Arrests Caused by Substance Use	.45
Driving While Impaired or Riding With an Impaired Driver	.71	School-Related Victimization or Crime	.31

Family Factors

Only one family related variable was significantly correlated with the current youth alcohol use measure: Parental Disapproval of Substance Use. Students whose parents who had higher levels of disapproval for substance use reported lower levels of current alcohol use $r = -.68$. This is one of the primary aspects of teen alcohol and drug use that can be affected by a substance abuse prevention approach.

School Factors

Four school related variables were related to current youth alcohol use rates. The significantly correlated variables and the direction and strength of the correlations are shown in the Table 7.

Table 7. Correlations between school factors and current alcohol use.

County Level Variables	Correlation	County Level Variables	Correlation
Levels of Drug Education	-.52	Perceived School Substance Use and Availability	.69
School Respect	-.40	Student Violence Indicators	.52

Community Factors

Of the many community-related variables examined, six had significant correlations with reported current youth alcohol use rates. The significantly correlated variables and the direction and strength of the correlations are shown in the Table 8.

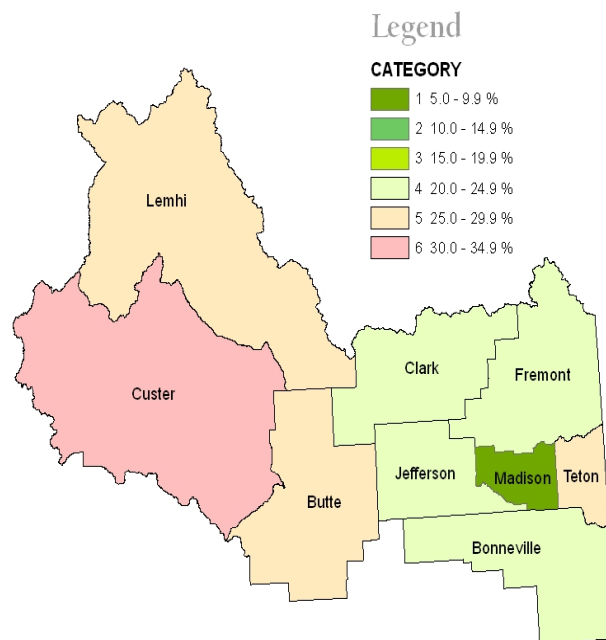
Table 8. Correlations between community factors and current alcohol use.

County Level Variables	Correlation	County Level Variables	Correlation
Presence of Retail Alcohol	.47	County Birth rate	-.61
Observed Weapon or Experienced Victimization with a Weapon	.30	County Death rate	.48
Renter Occupied Housing	-.35	Aid to the Aged, Blind & Disabled	.30

Region 7 Current Alcohol Use

Figure 1 shows reported and estimated youth current alcohol use as derived from the SUSSCS and Table 1 outlines the sources of the estimates. “Current Youth Alcohol Use” is a weighted estimate that reflects the proportion of survey respondents reporting alcohol use in 30 days prior to completing the survey. Based on the SUSSCS, the state average percentage of current youth alcohol users among 6th, 8th, 10th and 12th grade students was 27.2%. While it is encouraging to see that a given county or region has lower reported youth alcohol use than the state average, it is important to remember that any alcohol use by minors under the age of 21 is illegal and that efforts to prevent the use of alcohol and other drugs should continue. Table 1 shows how data were estimated when a grade or an entire county was not included in the survey.

Region 7



Created for use by the Idaho Dept. of Health and Welfare
Created by: Joseph Mieczewski, INSIDE Idaho GIS technician
January 16, 2007

Figure 1. Estimated alcohol use by county. The state average percentage of current youth alcohol users was 27.2%.

Table 1. Sources of alcohol use by county and grade. An “R” indicates that reported data from the SUSSCS was used. An “S” indicates that a statewide average for that grade was used as the estimate.

County	Grade			
	6th	8th	10th	12th
Bonneville*	S	R	S	R
Butte	S	S	S	S
Clark	S	S	S	R
Custer	S	R	S	R
Fremont	R	R	S	R
Jefferson	S	S	R	S
Lemhi	R	R	S	S
Madison	R	R	R	R
Teton	S	S	S	R
* In the table, R indicates that survey data were used for the grade and county; S indicates that the state average was used because local data were not available. County estimates are weighted by the number of students during the year of the survey. Differences in the number students can change the overall estimate of alcohol use between counties where all grade levels are estimated.				

R7 Substance Use Correlates

A number of individual/peer, family, school and community factors were found to be significantly correlated with current alcohol use (see Table 5-Table 8 in the state portion of the needs assessment for individual factor correlations). The distribution of each of these archival variables is shown for the individual counties within the region. In each graph, the state average has been rescaled to 50 with a standard deviation of 15 (represented by the line at 50).

Individual/Peer Factors

A variety of individual/peer factors were significantly correlated with substance use. Many of these relationships are consistent with what might be expected. For example, students who report higher levels of alcohol use also indicate that their friends use substances. Similarly, students who report that they disapprove of substance use by their peers report lower levels of alcohol use themselves. In contrast, participation in extracurricular activities is generally considered to be a protective factor. However, in Idaho, SUSSCS participants in extracurricular activities reported higher alcohol use. The individual/peer factors include:

- Student Disapproval of Substance Use by Others
- Student Perception of Substance Use Risks
- Substance Use By Friends
- Driving While Impaired or Riding With an Impaired Driver
- Extracurricular Activities

- Intensity of Recent Substance Use
- Trouble or Arrests Caused by Substance Use
- School-related Victimization or Crime

Student Disapproval of Substance Use by Others – Youth who disapprove of substance use by their peers are less likely to use alcohol and other substances themselves. Substance abuse prevention programs that teach healthy decision making and critical thinking skills, especially those that target elementary and middle school youth before experimentation has begun, can foster the disapproval of substance use.

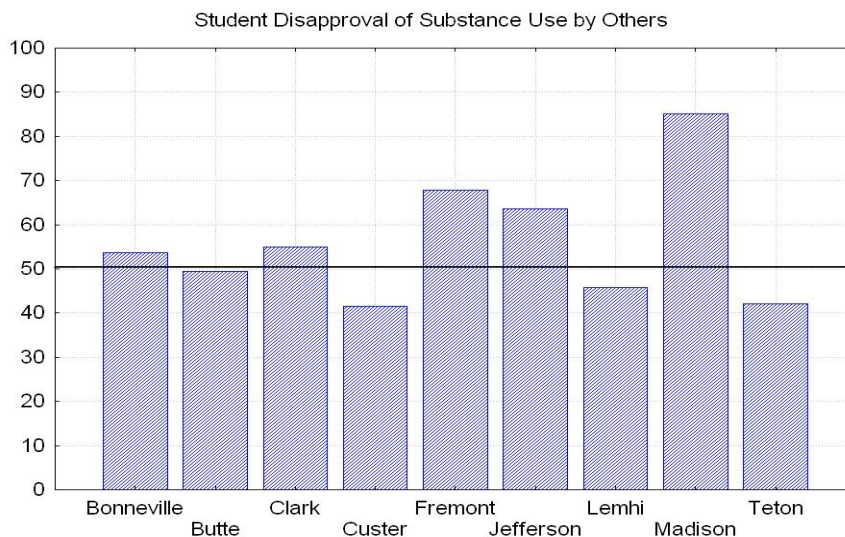


Figure 2. Student disapproval of substance use by their peers is negatively associated with alcohol use. Students who disapproved of substance use by their peers reported lower alcohol use themselves.

Student Perception of Substance Use Risks – Youth who believe that substance use carries unacceptable risks or is harmful are less likely to use alcohol and other substances. Substance abuse prevention programs that teach healthy decision making and convey accurate risk information, especially those that target middle and early high school youth, can increase youth understanding of the risks of substance use and should result in lower use rates.

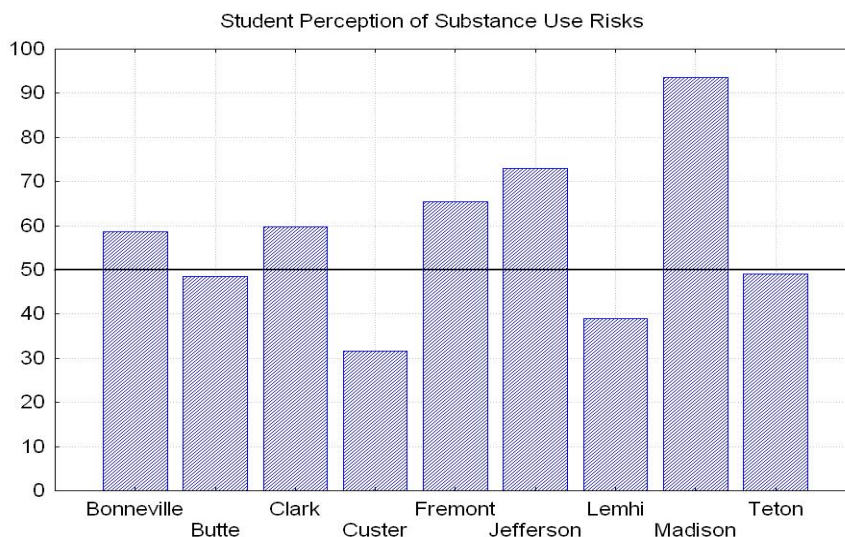


Figure 3. Student perception of risk is negatively correlated with alcohol use. As perceptions of potential risk or harm from substance use increases, youth reported alcohol use decreases.

Substance Use By Friends – The influence of the peer group on adolescent decision making, including the decision to use substances, is one of the most powerful forces parents and teachers have to contend with. Parenting programs that stress the importance of being actively involved in the child’s life, knowing where and whom the child is with at all times, and clear communication and enforcement of rules regarding acceptable friends and substance use can mitigate the influence of a negative peer group. Additionally, school and community programs that provide safe havens and prosocial activities can increase exposure to positive peer groups and adult role models and can lessen the influence of the negative peer group.

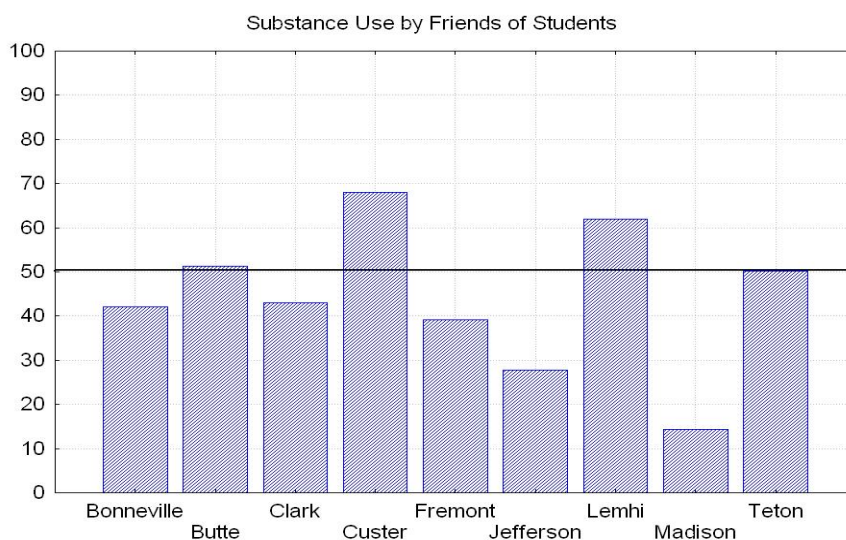


Figure 4. Substance use by friends is positively correlated with youth reported alcohol use. Students who reported that their friends used substances reported higher alcohol use for themselves.

Driving While Impaired or Riding With an Impaired Driver – Although substance use in itself contains hazards for youth, alcohol and other drugs played a role in 6.9% percent of all vehicle collisions and 36.4% of vehicle related fatalities according to 2005 Idaho Transportation Department data. This is an avoidable risk. Substance abuse prevention programs, as well as community, health, law enforcement, and transportation agencies can all communicate this message. School, church and community programs can reduce alcohol availability and exposure and therefore reduce the opportunity for driving while impaired or riding with an impaired driver. Community coalitions can also play a role by working with local law enforcement and civic bodies to promote the message about the risks and costs of impaired driving.

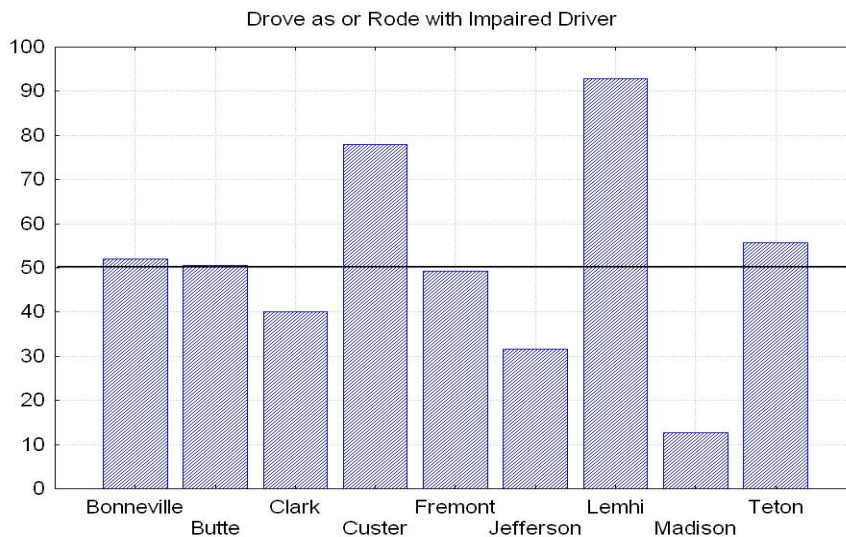


Figure 5. Driving while impaired or riding with an impaired driver was positively correlated with reported alcohol use. Students who reported driving while impaired or riding with an impaired driver reported higher alcohol use themselves.

Extracurricular Activities – Surprisingly, a positive correlation was found between participation in extracurricular activities and alcohol use, that is, participants in extracurricular activities reported higher alcohol use. The availability of safe, supervised after school activities has generally been considered a protective factor. However, research has found that while participation in prosocial activities such as student leadership, music, etc., is associated with lower alcohol use, participation in high school team sports can be associated with higher rates of alcohol use. In the Idaho data, the behavior of this subgroup may account for the counterintuitive findings associated with extracurricular activities. The SUSSCS did not afford the ability to separate the type of extracurricular activity to further examine this issue. Substance abuse prevention programs that address the acceptability of alcohol use by high school athletes may have some impact, but as long as the use culture is supported or ignored by parents and coaches, this tradition will likely continue.

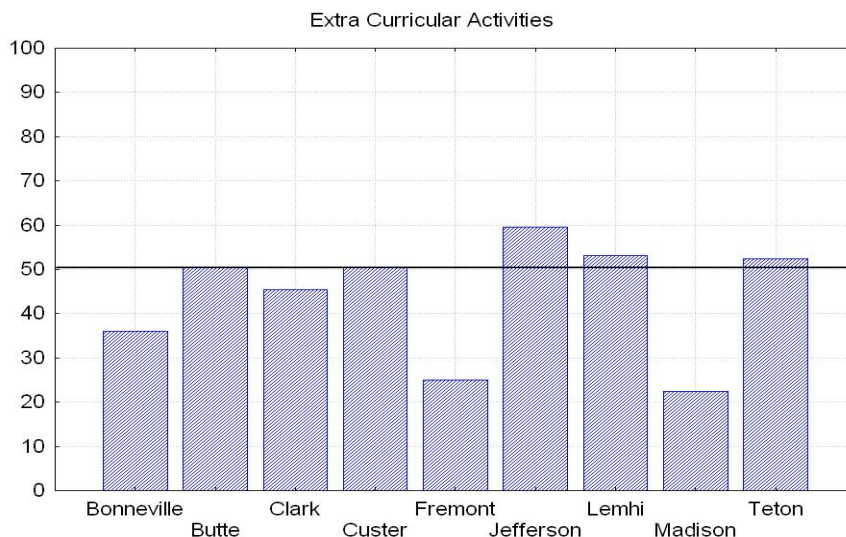


Figure 6. The amount of extracurricular activities was positively correlated with substance use. Students reporting more extracurricular activity reported higher levels of alcohol use.

Intensity of Recent Substance Use – Youth who reported intense substance use, such as binge drinking, were more likely to use other substances at high intensity levels, to use more than one substance at the same time, and to use substances more often. People using substance at this level have moved beyond the reach of primary substance abuse prevention, which is targeted at youth before they have begun routine substance use, and should be referred to early intervention, treatment or mental health professionals.

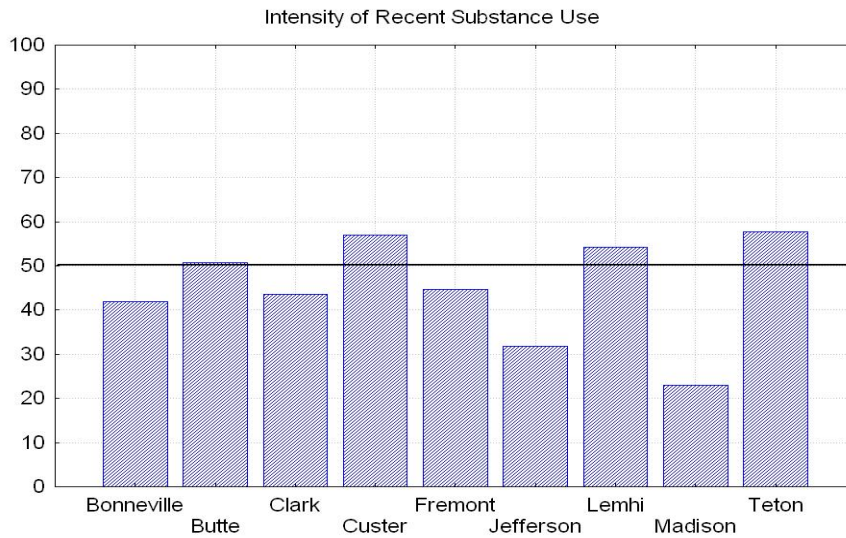


Figure 7. Intense use of substances was positively correlated with youth reported alcohol use. Students who reported experiencing higher levels of intensity during substance use also reported higher levels of alcohol use.

Trouble or Arrests Caused by Substance Use – Because judgment is impaired by alcohol and other substance use, intoxicated people have a higher risk of behavior that brings scrutiny by parents, school, community and law enforcement personnel. Quality, evidence-based substance abuse prevention programs delivered before adolescence can reduce the risk of arrest or other trouble by reducing the likelihood of substance use in general, and by increasing protective factors that include respect for self and others.

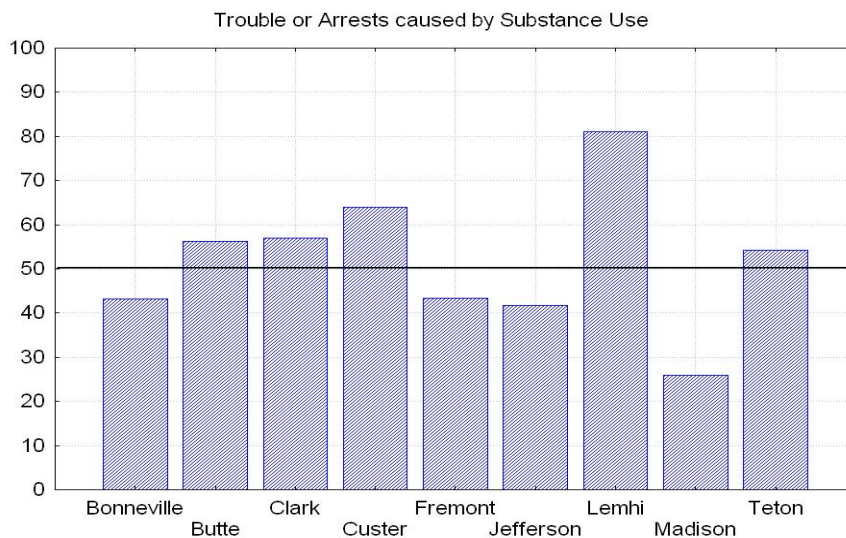


Figure 8. Instances of substance use related troubles or arrests were positively correlated with alcohol use. Students who reported higher levels of alcohol use also reported higher levels of trouble or arrests due to substance use.

School-related Victimization or Crime – The presence of high levels of school-related victimization or crime may also reflect characteristics of the community where the school resides. In both environments, higher levels of social risk factors and lower levels of personal protective factors may be related to higher alcohol use. Substance abuse prevention initiatives that address the school or community climate, and substance abuse and other prevention programs that address anger management, conflict resolution and violence could also play a role in reducing substance use by addressing those risk factors that violence, substance use and social disorder have in common.

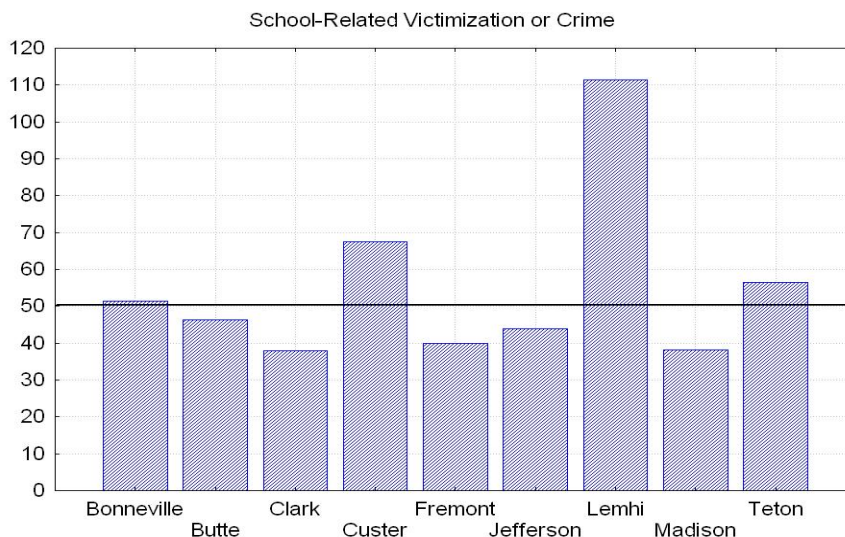


Figure 9. School-related victimization or crime was positively correlated with alcohol use. Students reporting higher levels of victimization also reported higher alcohol use.

Family Factors

Of the variety of possible family factors related to current youth alcohol use, only one was found to be significantly correlated - Parental Disapproval of Substance Use. In the risk and protective factor literature, parental attitudes, particularly those that oppose substance use, are considered protective factors. This relationship was observed in the Idaho SUSSCS data.

Parental Disapproval of Substance Use – The impact of parental attitudes about teen substance use *and the communication of that disapproval* is one of the strongest protective factors that research has identified. Parenting programs that enhance family communications in general, and conversations about substance use in particular, can reduce the likelihood of youth substance use. In addition, activities intended to raise community awareness and social norming programs can make parents aware of the importance of their role as substance abuse prevention educators.

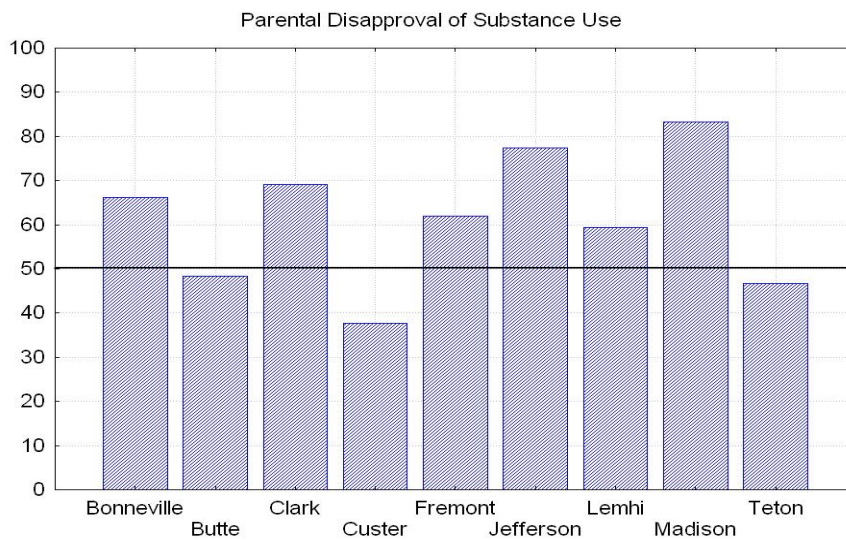


Figure 10. Youth perception of parental disapproval is negatively associated with alcohol use. Students who reported that their parents disapprove of substance use reported lower alcohol use.

School Factors

At the state level, four school related variables correlated significantly with youth reported alcohol use. The following figures show the relative standings of each county in the region for these factors, compared to the state average of 50 and to the other counties in the region.

- Levels of Drug Education
- School Respect
- Perceived School Substance Use and Availability
- Student Violence Indicators

Levels of Drug Education – The availability of substance abuse education was found to be negatively correlated to youth reported alcohol use. As student perception of available drug education increased, reported alcohol use decreased. This is the goal of substance abuse prevention. Beyond simple provision of drug education programs, selecting evidence-based programs appropriate for the target population and community, implementing those programs faithfully, and using outcomes to monitor and fine tune the program can all increase the impact of drug education.

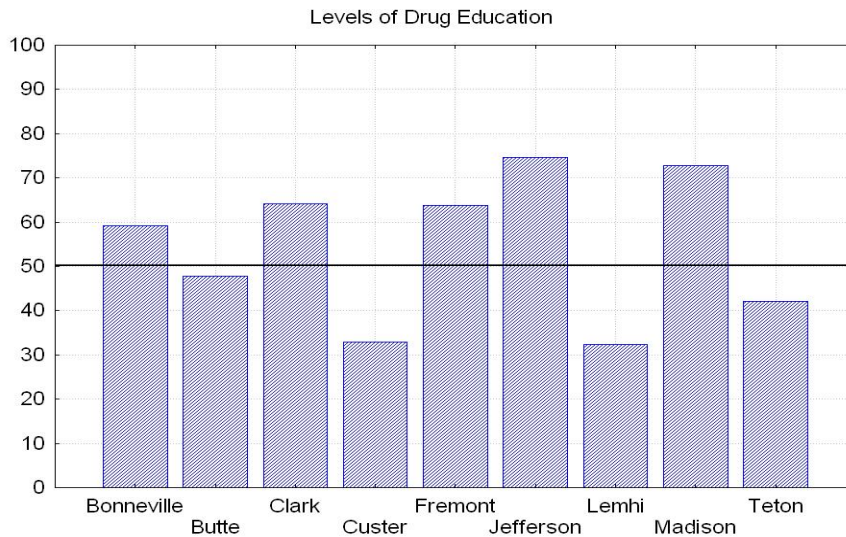


Figure 11. Student drug education. Students who reported higher levels of drug education reported lower levels of alcohol use.

School Respect – School respect refers to the percentage of students that perceives there is a healthy degree of honesty and respect shown to the students by the school, as well as between students. In Idaho, school respect had a negative relationship with youth reported alcohol use. Where students reported higher levels of perceived respect, they also reported less alcohol use. Substance abuse prevention initiatives that address the quality of the school climate can impact the perception of respect, which can increase student attachment to the school. Staying in school and doing well is one of the strongest protective factors against substance use for youth.

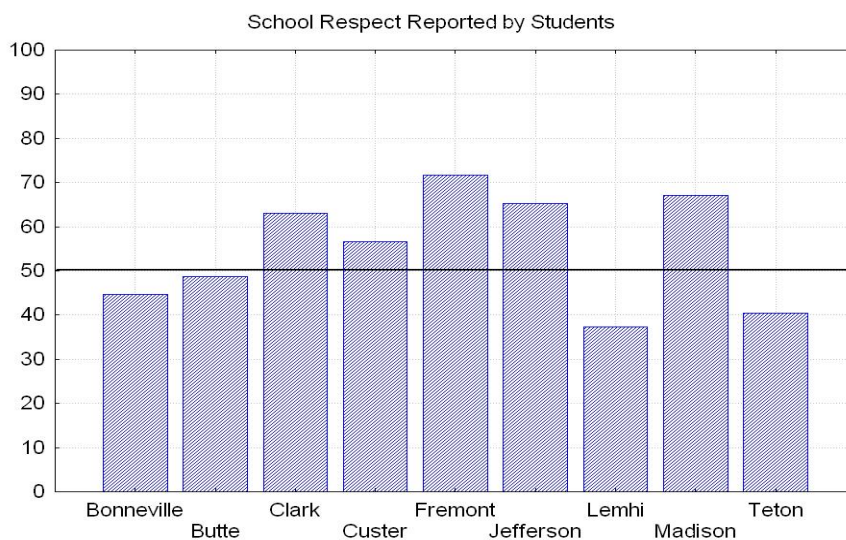


Figure 12. Youth perception of school respect for students. As perceived school respect increased, youth reported alcohol use decreased.

Perceived School Substance Use and Availability - Perception of availability can be addressed through accurate reporting of use rates and by programs that include a social norming component designed to address the notion that “everybody does it.” Community efforts to limit youth access to alcohol can reduce actual use as well as perceived availability.

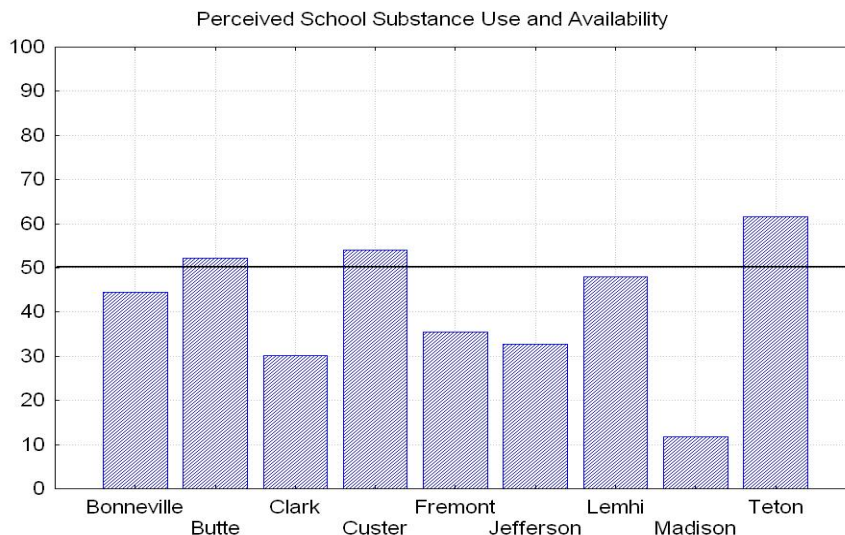


Figure 13. Youth reported perception that drugs and alcohol are available and that use among their peers is common-place. High levels of perceived use and availability are associated with higher reported youth alcohol use rates.

Student Violence Indicators – The impact of school and community violence can be addressed through a number of initiatives. Substance abuse prevention programs that address character education, social skills, bullying, conflict resolution and anger management can contribute to efforts to reduce the perceived and actual violence within a community.

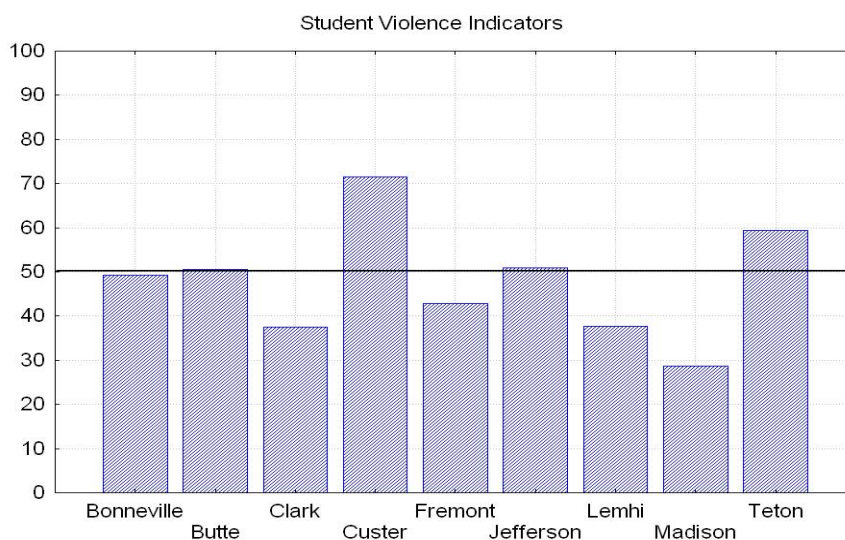


Figure 14. Student perception of violence indicators in the school and community. Higher ratings of student violence indicators are associated with higher alcohol use rates among youth.

Community Factors

At the state level, six community based factors were found to be correlated with current youth alcohol use. The following figures show the relative position of each county in the region for these six factors, compared to the state average (50) and to each other. The following pages show the position of the counties for each of the community factors below.

- Presence of Retail Alcohol
- Observed Weapon or Experienced Victimization with a Weapon
- Renter Occupied Housing
- County Birth Rate
- County Death Rate
- Aid to the Aged, Blind & Disabled

Presence of Retail Alcohol – Alcohol availability is related to the rate at which youth report alcohol use. Where there is little access to alcohol, lower use rates are reported. The impact of alcohol availability can be addressed through social norming with youth and parents, server training and monitoring of sales to minors.

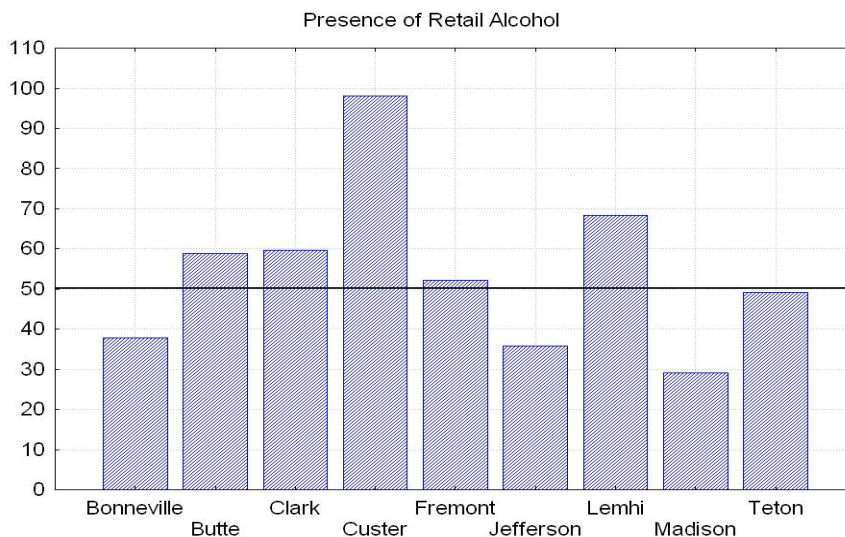


Figure 15. The presence of retail alcohol reflects the general availability of alcohol in a county. When more alcohol is available in a county, the youth report more alcohol use.

Observed Weapon or Experienced Victimization with a Weapon – The prevalence of weapons and bullying within a school or community needs to be addressed from numerous perspectives. Substance abuse prevention programs that address character education, social skills, bullying, conflict resolution and anger management could contribute to the efforts to reduce interpersonal violence.



Figure 16. The percentage of students who reported seeing a weapon or experiencing victimization. Seeing weapons at school or being victimized with a weapon are positively correlated with alcohol use.

Renter Occupied Housing – A higher proportion of rental housing reflects a higher level of community transition, that is, of people moving in and out of the community. The assumption is that people who reside briefly in a community don't develop the same levels of community attachment and community pride, and therefore don't contribute as much to community well being in a number of areas, including the prevalence of substance use. It is unlikely that community transition issues can be influenced from a substance abuse prevention perspective.

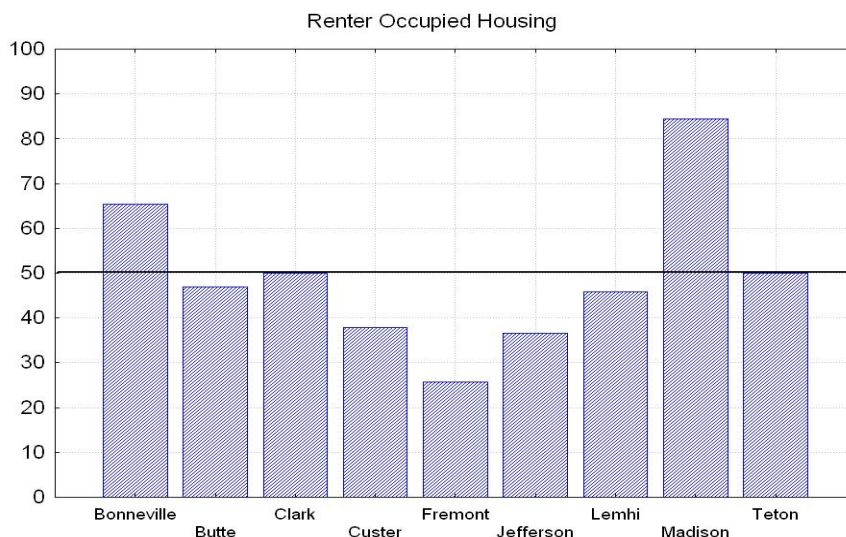


Figure 17. A higher proportion of rental housing is often seen as an indication of higher community transition and mobility, which is traditionally seen as a risk factor for substance use. In Idaho, however, a higher proportion of rental housing was found to be correlated with lower reported youth alcohol use.

County Birth Rate, County Death Rate and Aid to the Aged, Blind & Disabled – These three factors were all found to have strong relationships to current youth alcohol use. While it is tempting to offer hypotheses about how these factors are related to youth alcohol use, it is more likely that there are other, unknown factors that shape those relationships. Further research is needed to identify the underlying patterns and determine if they are amenable to change from a substance abuse prevention model.

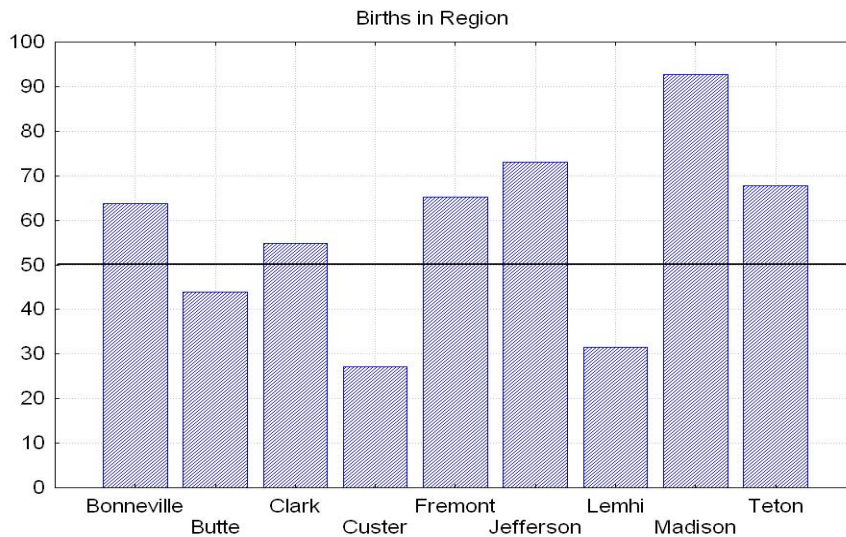


Figure 18. Population birth rates are not generally associated with youth alcohol use. In Idaho, however, there is a strong negative relationship between births and alcohol use. Lower population birth rates were found to be associated with higher youth reported alcohol use rates.

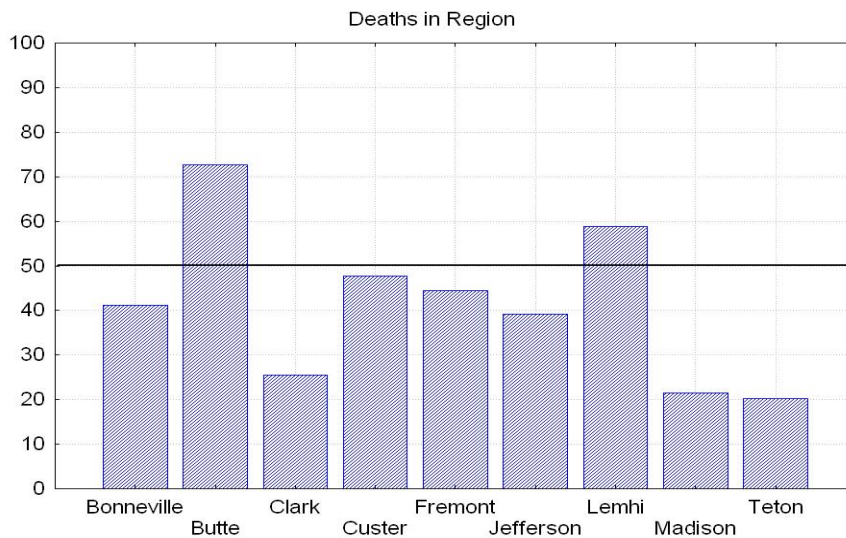


Figure 19. Population death rates are not usually directly associated with youth alcohol use. In Idaho, however, there is a positive relationship between the county death rate and youth alcohol use. Higher population death rates are associated with higher youth alcohol use.

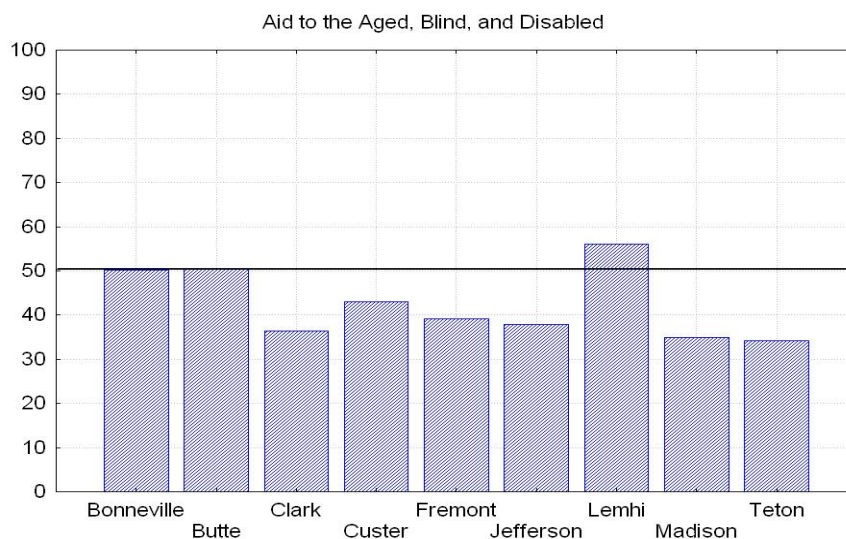


Figure 20. Aid to the aged, blind and disabled is an indicator of county economic deprivation, which can be a risk factor associated with substance use. In Idaho, higher ratings of economic aid were found to be associated with higher rates of current youth alcohol use.